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ATTORNEYS FOR PLAINTIFF
TARI LABS, LLC

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

TARI LABS, LLC,

Plaintiff,

v.

LIGHTNING LABS, INC.,

Defendant.

Case No. 3:22-cv-07789-WHO

DECLARATION AND PRELIMINARY EXPERT REPORT OF DR. ROBERT PALMATIER IN SUPPORT OF PLAINTIFF'S EX PARTE APPLICATION FOR TEMPORARY RESTRAINING ORDER TO PRESERVE THE STATUS QUO AND MOTION FOR PRELIMINARY INJUNCTION

Date:
Time:
Judge: Hon. William H. Orrick
Courtroom: Via Zoom videoconference

I, Robert W. Palmatier, Ph.D., John C. Narver Endowed Chair in Business Administration and Professor of Marketing at the University of Washington, Foster School of Business, declare that the following are my expert opinions:

1. I have been retained as a marketing expert by Plaintiff Tari Labs, LLC. ("Plaintiff" or "Tari") to survey and evaluate the level of consumer confusion caused by Defendant Lightning Labs, Inc. ("Defendant," "Lightning Labs," or "Taro") and its impact on Tari's brand, reputation, and marketing performance. In addition, I have been asked to analyze and discuss any subsequent marketing and business issues resulting from the consumer confusion. I have personal knowledge of the opinions set forth in this declaration, which are based on my personal experience, training, and research and upon materials and information I have reviewed as detailed below. I could and would testify competently to these matters if called upon to do so.

I. SUMMARY OF OPINIONS

2. Tari and Lightning both market blockchain protocols that allow users to create and transfer digital assets on the blockchain. Tari markets its protocol and related products and services under its registered trademark TARI® while Lightning recently announced plans to market its own protocol under the name "TARO."

3. My goal in this project was to scientifically assess the level of consumer confusion, if any, between Defendant's and Plaintiff's marks among potential users of the parties' products and services. I also opine upon the impact that such confusion will cause in the marketplace.

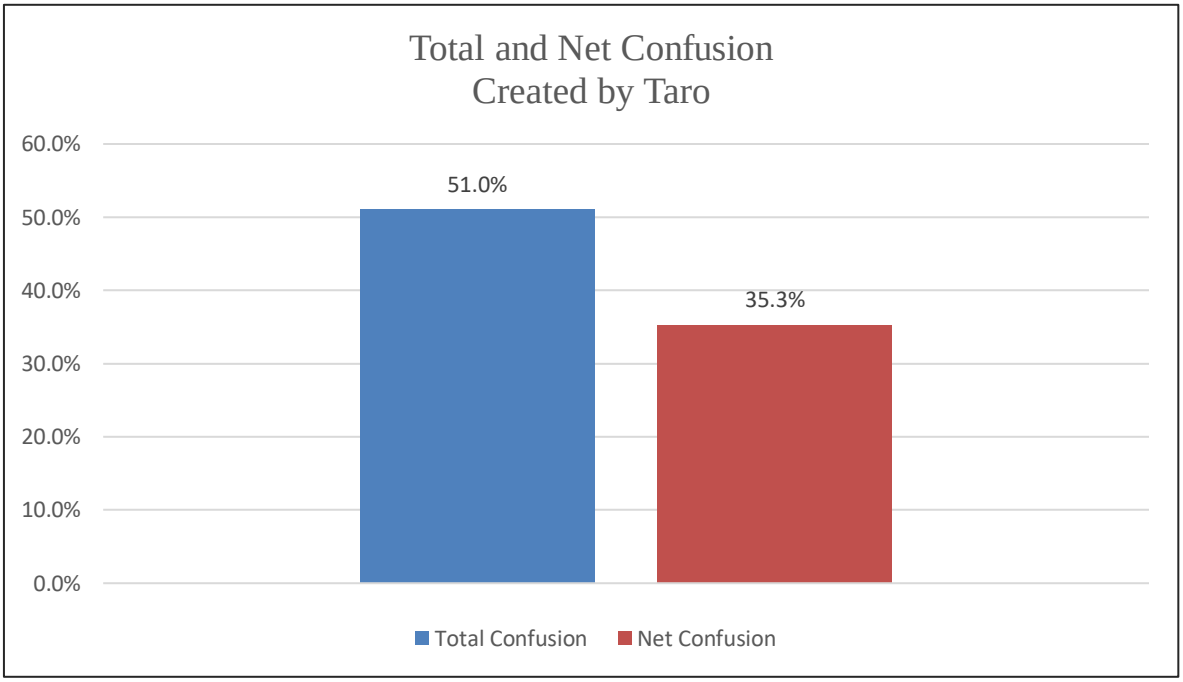
4. To provide insight into these issues, I conducted a scientific survey of potential consumers to analyze the level of confusion with the TARI® mark caused by Lightning's "TARO" mark, considering both marks as they are used in the marketplace. Specifically, I designed a "*Squirt*" format survey of relevant customers using images of the marks from the parties' marketing materials (the "Survey").

5. The Survey results show that the TARO mark is highly likely to cause consumer confusion and to mislead prospective purchasers into believing that the Taro products are associated with the TARI® mark and brand. The Survey demonstrated that 51% of relevant

consumers believed that Taro products and services were owned by, endorsed by, or otherwise affiliated with Tari (i.e., total confusion).

6. To ensure that the Survey accurately tested confusion attributable to the use of the TARO mark (as opposed to other factors), I also compared the confusion produced by the TARO mark to the confusion produced by "control" brands from other companies in the digital assets industry (Corda, Polygon, and Echo).

7. The confusion produced by the TARO mark significantly exceeded the background levels established by the three "control" brands used in the Survey. Measured against this baseline, **the level of "net" confusion caused by Taro was 35.3%**. This level of net confusion is about double what marketing scientists and courts consider to be substantial.[1]



8. The high levels of consumer confusion show that Tari would face long-term irreparable harm if Defendant were to proceed to a full-scale commercial launch of its protocol under the TARO mark. Defendant's launch of its protocol under a confusingly similar mark is

[1] Ford, Gerald L. (2012), "Survey Percentages in Lanham Act Matters," in Shari Seidman Diamond and Jerre B. Swann (eds.), *Trademark and Deceptive Advertising Surveys: Law, Science, and Design*, (Chicago: ABA Publishing), pp. 311 – 326.

likely to injure Tari by suppressing the Tari protocol's adoption by new users and developers, damaging Tari's ability to control the goodwill and customer experience associated with the Tari trademark, and impairing the unique source-identifying function of Tari's brand. All of these harms will be effectively impossible to remedy after the fact.

9. These dangers are particularly acute because Tari's own products and services are in an early stage. The launch of a confusingly-named protocol by a larger competitor threatens to swamp Tari in the marketplace, teaching developers and consumers to associate "TARO" and similar marks such as TARI® with Defendant's products and services. Once this happens, it will be difficult or impossible for Tari to build up goodwill under its own brand name.

10. Under these circumstances, I conclude that Tari faces significant irreparable harm to its business and ability to market its products under its TARI® trademark if Defendant's products and services are launched at scale.

II. QUALIFICATIONS

11. I am the John C. Narver Endowed Chair in Business Administration and Professor of Marketing at the University of Washington, Foster School of Business where I have taught since 2007. I am also the founder and research director of the University of Washington's *Center for Sales and Marketing Strategy* and the *Global Sales and Marketing Strategy Institute*, a global organization focused on linking business and academics to generate knowledge in the domain of sales and marketing strategy.

12. I was the past editor at the *Journal of Marketing* and *Journal of the Academy of Marketing Science*. Both journals typically rank among the top four highest impact-factor marketing journals in the world and are the highest rated journals in marketing publishing survey research. As editor, I have evaluated and made the final decision on thousands of research papers submitted by marketing scholars to determine if they meet acceptable scientific standards for publication in these peer reviewed journals. Many of the papers I have evaluated in this role use survey and field experimental designs based on the marketing science principles that underlie the surveys described in this declaration.

13. I have earned the following degrees and completed the following post-doctoral studies: (a) Post-Doctoral in Marketing, Northwestern University, Evanston, IL 2005; (b) Ph.D. Marketing, University of Missouri, Columbia, MO 2004; (c) M.B.A. Georgia State University, Atlanta, GA 1989; (d) M.S.E.E. Electrical Eng., Georgia Institute of Technology, Atlanta, GA 1984; and (e) B.S.E.E. Electrical Eng., Georgia Institute of Technology, Atlanta, GA 1983.

14. Prior to entering academia, I held various industry positions, including President and Chief Operating Officer of C&K Components and European General Manager and Sales & Marketing Manager at Tyco-Raychem Corporation. I also served as a U.S. Navy Lieutenant onboard nuclear submarines.

15. I have published over 100 peer reviewed articles, books, and book chapters, focused on a wide range of issues including marketing strategy, data analytics, understanding the roles of brands and relationships in marketing, customer loyalty, customer decision making, and methodological approaches for the analysis of marketing data (field experiments, survey research, regression analyses, and a wide range of analyses of secondary data). My research has also been featured or referenced in *The New York Times Magazine*, *Nature*, *The Economist*, *Electrical Wholesaling*, *Agency Sales*, and *The Representor*, as well as on NPR and MSNBC. I teach or have taught marketing strategy and data analytics in the doctoral, EMBA, and MBA programs at the University of Washington.

16. In addition, I have been awarded the Interorganizational Research Award for Lifetime Contribution (focused on business-to-business marketing), Mahajan Award for Lifetime Contributions to Marketing Strategy, Harold H. Maynard Award for best paper of the year in top marketing journal (based on survey research), and Sheth Journal of Marketing Award for article that has "made a long-term contribution to the discipline of marketing."

17. A complete list of my papers, books, awards, and experience are listed outlined in **Exhibit 1**.

18. My hourly rate in this matter is $600 per hour.

19. My opinions in this report are informed by my experience in the field of marketing. I may testify regarding my background and experience to the extent it may be helpful to the Court, and to the extent it impacts my analysis concerning this case.

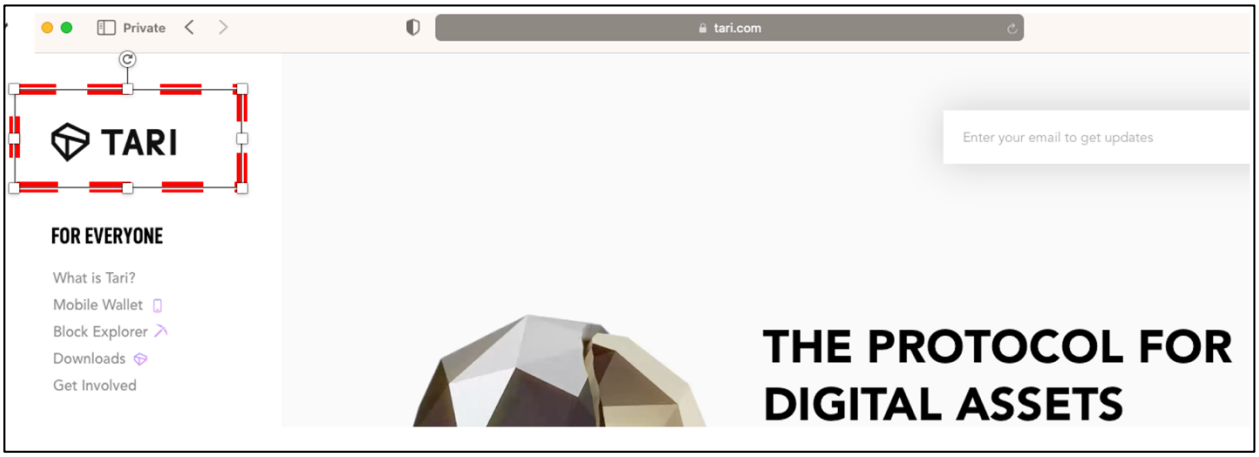
III. BACKGROUND

20. Below is a summary of pertinent background facts regarding Tari and Taro.

A. Tari's Business and the TARI® Mark

21. Tari is a start-up technology company that markets the Tari protocol, a blockchain protocol allowing users to create and transfer digital assets on the blockchain, as well as related products and services.

22. The TARI® wordmark is the primary identifier that Tari uses in conducting its business, as reflected in the screenshot of its website home page (shown below in dotted red box).[2] Specifically, the core TARI® mark is a stylized wordmark (i.e., word "Tari") and a unique embedded angular "T" symbol (i.e., logo).



23. The Tari protocol is a blockchain protocol based on the Monero blockchain that allows users to create digital assets, define rules for their transfer on the blockchain, and hold and transfer those assets.[3] Its intended users include developers who can integrate the Tari protocol into their own products, as well as end users who will ultimately use the Tari protocol to create and transfer their own digital assets.[4]

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[2] https://www.tari.com
[3] https://www.tari.com/#what-is-tari
[4] https://themerkle.com/what-is-the-tari-protocol/; https://www.tari.com/#what-is-tari

24. Tari also markets other products and services related to the Tari protocol. These include the Tari Aurora Mobile Wallet, which is available on the Apple and Android app stores and allows users to test the Tari protocol and create their own unique Emoji IDs, strings of emojis that provide a user-friendly alternative to long and complex internet addresses for cryptocurrency transfers and other interactions.[5]

25. Tari's products also include Tari tokens.[6] Users can mine Tari Tokens by downloading the Tari Base Node, which is available on Mac and Windows. In their current phase, Tari tokens can be used to purchase merchandise from the Tari store and to experiment with transactions using the Tari protocol.[7]

26. Because the Tari protocol is a foundational technology that others can use to create their own products and services, the range of products and services that will ultimately be marketed using the protocol is effectively limitless.[8]

27. Tari has achieved considerable success and recognition even in its early stages. It has many followers across platforms such as Discord, Substack, Telegram, IRC, Twitter, and Reddit.[9] Both industry media and general-interest publications have given Tari favorable coverage, including such outlets as CoinDesk, Nasdaq.com, the Merkle News, Fortune, Mashable, and Bitcoin Magazine.[10]

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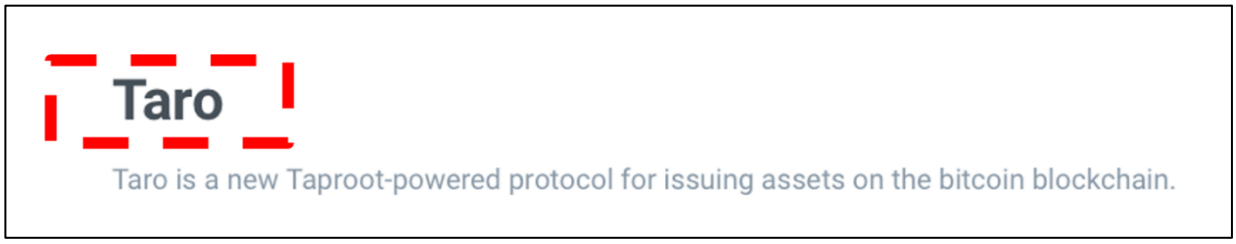
[5] https://apps.apple.com/us/app/tari-aurora/id1503654828
[6] https://www.tari.com/#what-is-tari
[7] https://www.tari.com/#get-started
[8] https://www.tari.com/#tari-for-creators
[9] https://www.tari.com/#get-involved
[10] *See* "Monero's Lead Maintainer Is Helping Launch a Crypto Trading Protocol," *CoinDesk*, May 22, 2018, September 13, 2021 (https://www.coindesk.com/markets/2018/05/23/moneros-lead-maintainer-is-helping-launch-a-crypto-trading-protocol/), "Trai Introduces a Blockchain Protocol for Digital Assets Build on Monero," *Nasdaq.com*, May 22, 2018 (https://www.nasdaq.com/articles/tari-introduces-a-blockchain-protocol-for-digital-assets-built-on-monero-2018-05-22), "What Is the Tari Protocol?" *The Merkle News*, May 25, 2018 (https://themerkle.com/what-is-the-tari-protocol/), "Ticketfly Cofounder and Monero Ringmaster Start New Blockchain Project," *Fortune*, May 22, 2018 (https://fortune.com/2018/05/23/crypto-blockchain-monero-ticketfly-project-tari/), "Say hello to Yats: Why investors are paying thousands to 'own' emoji," *Mashable*, July 22, 2021 (https://mashable.com/article/what-are-yats?taid=60f9cbf3e01f2f000112956f&utm_campaign=trueAnthem%3A+Manual&utm_medium=trueAnthem&utm_source=facebook), "Tari Introduces a Blockchain Protocol for Digital Assets

28. The TARI® mark captures its distinctive and valuable brand and goodwill from these efforts and public recognition.

B. Defendant's Business and TARO Mark

29. Recently, the Defendant in this case, Lightning Labs, announced plans to launch its own blockchain protocol that will compete with the Tari protocol. Lightning Labs has begun marketing its own protocol using the highly similar name "Taro."

30. Reviewing the landing page for Taro on the Lightning Labs website based on an online search, the user sees the word mark "Taro" as shown below (in red dotted box).[11] The TARO mark has many elements common to Tari's wordmark that will increase potential confusion in the marketplace including 1) both beginning with the letter "T", 2) both capitalizing only the first letter, 3) both having the same first three letters "Tar", 4) both being four letters long, 5) both ending with a vowel, 6) both having the same color shade (black/dark grey) as commonly depicted in the marketplace, 7) both using similar fonts in various presentations, and 8) both having the only different letter being next to each other on a typical keyboard (i.e., "i" and "o").



31. Lightning Labs was founded in 2017 and is best known for creating the Lightning Network, a service that facilitates payments and liquidity using the Bitcoin blockchain. Lightning Labs' launch of the Taro protocol allowing users to create digital assets and manage their transfer represents an expansion into a new market. It also puts Taro in competition with Tari.

32. Like the Tari protocol, the Taro protocol will be used to create a variety of digital assets. According to the website for Taro: "Taro lets you issue all kinds of assets on bitcoin, both unique and fungible. There are no technical limits to what these assets can represent, including

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Built on Monero," *Bitcoin Magazine*, May 22, 2018 (https://bitcoinmagazine.com/business/tari-introduces-blockchain-protocol-digital-assets-built-monero).

[11] https://docs.lightning.engineering/the-lightning-network/taro

stablecoins, shares, tickets, ownership rights or art. Assets can be programmed using Taro's asset scripts, allowing for a broad range of functionality similar to bitcoin transactions."[12]

33. Also like the Tari protocol, the target users for the Taro protocol include ordinary, technologically unsophisticated consumers in addition to developers. In an interview regarding Taro, Lightning Labs' co-founder and CEO Elizabeth Stark described Taro's intended users as "somebody who doesn't want to understand the protocol or bitcoin. It's just somebody who wants to transact cheaply and globally without holding bitcoin themselves." [13]

C. The Parties' Products are Proximate in the Market

34. When evaluating the risk of consumer confusion and selecting an appropriate survey design, researchers consider the proximity of the products in the marketplace and the degree to which they are similar to one another. When products and services are similar and will appear close to one another in the marketplace, it is more likely that consumers will be confused. Here, the Tari and Taro protocols will be close to one another in the marketplace, which increases the likelihood that consumers will be confused between the two firms.

35. ***Similarity of Products and Services***. The parties' products and services are similar because both parties market blockchain protocols that allow users to create, hold, and transfer digital assets. Both parties have indicated that the protocols will be used in connection with a variety of digital assets as they are adopted widely in the market.

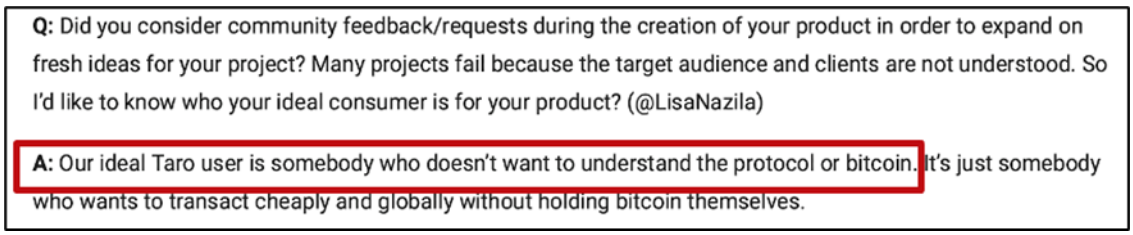
36. ***Similarity of Potential Consumers***. The potential consumers for the Tari and Taro protocols are also similar. Both Tari and Lightning have described their target consumers broadly, including anyone that wants to create digital assets or engage in transactions using such assets.

37. Additionally, both companies target their products both to developers and to consumers with relatively low knowledge of technology. Defendant has stated in an interview that

[12] https://docs.lightning.engineering/the-lightning-network/taro/faq

[13] Lightning & Taro: Towards a Multi-Asset Crypto Payment Network (2022), AAX Trends, July 8, 2022.

its Taro products are targeted to consumers and markets with low knowledge (as shown below in the red box).[14]



38. The CEO of Lightning Labs (i.e., Taro) has also drawn a parallel between its products and credit cards in the sense that consumers do not know how either works (shown below in red box).[15] This again reinforces that the target consumers for the Taro products and services are largely ordinary consumers.

39. The fact that the parties target consumers with a low degree of technological know-how, in addition to developers, further heightens the likelihood of consumer confusion.

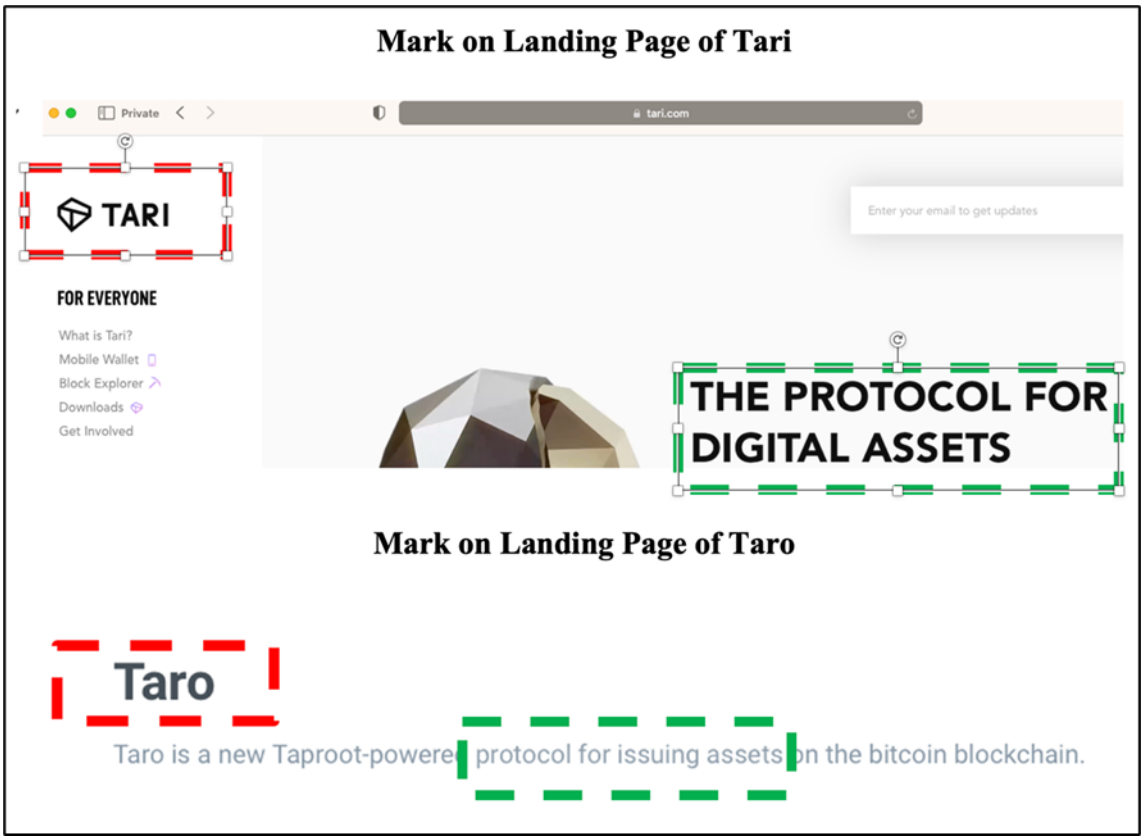
40. In addition, since the marketplace for digital assets is relatively new and developing quickly, each brand is effectively writing on a blank slate with consumers and attempting to build brand awareness with a unique identity. Without preexisting marketplace cues, consumers can more easily be confused by differences between the marks for new brands and cannot be expected to resolve confusion between "Tari" and "Taro" on their own.

41. ***Similarity of Marketing Channels***. The Tari and Taro protocols also share similar marketing channels. One of these shared marketing channels is the internet. Searching for either the Tari or Taro protocol would typically take a prospective customer to these landings pages or other web pages displaying one of these two marks as shown below.[16] In addition, to the highly similar

[14] Lightning & Taro: Towards a Multi-Asset Crypto Payment Network (2022), AAX Trends, July 8, 2022.
[15] https://www.cnbc.com/2022/04/05/bitcoin-powers-a-fast-new-way-to-send-us-dollars-around-the-world.html
[16] https://www.tari.com; https://docs.lightning.engineering/the-lightning-network/taro

word marks (see dotted red boxes below), the "tag lines" also have very similar information where in both brands it references "protocols" for digital "assets" (see dotted green boxes below):

Mark on Landing Page of Tari



Mark on Landing Page of Taro

42. The parties also both market their protocols using the same internet platforms. Resources related to Tari and Taro are both available on Github, a website used by developers.[17] And both parties use the same social media platforms, including Twitter, Reddit, Discord, and Substack.[18]

43. The parties also share other common industry marketing channels. They promote their protocols in the same industry press publications, including Bitcoin Magazine and other

[17] *See* https://github.com/tari-project/tari, https://github.com/lightninglabs/taro#readme

[18] Twitter: https://twitter.com/tari_labs, https://twitter.com/lightning; Reddit: https://www.reddit.com/r/tari/, https://www.reddit.com/r/lightningnetwork/; Discord: https://discord.com/invite/q3Sfzb8S2V, https://discord.com/invite/qEzTQMqJc7; Substack: https://tari.substack.com/, https://lightninglabs.substack.com/;

outlets.[19] And both parties market their products at the same trade shows and conferences, including appearing together at the Magical Crypto Conference in 2019 and 2020, where both companies' leaders were featured speakers.[20]

44. The high degree of similarity between the parties' marketing channels enhances the likelihood that consumers will be confused by the similar "Tari' and "Taro" marks.

IV. SURVEYS AND METHODOLOGY

45. To test the level of confusion between the parties' products and services, I designed a scientific survey of potential customers (the "Survey"). As detailed below, the results show a high degree of consumer confusion.

A. Survey Design

46. The Survey followed the "Squirt" or "lineup" format.[21] The "Squirt" format is recognized as an appropriate methodology for assessing likelihood of confusion when the products are "proximate" in the marketplace, and the senior brand (i.e., Tari) is not "accessible" in memory, requiring an "aided" comparison.[22]

47. From my research and experience, these conditions describe the relationship between Tari and Taro. Plaintiff's and Defendant's firms offer products and/or services that overlap in the market in many different ways, including: 1) utilizing the same marketing channels (e.g., online search and website channels, similar industry promotional channels, and digital marketing channels); 2) marketing to similar developers and consumers; and 3) offering similar products and services.

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[19] *Compare* Bitcoin Magazine, Tari Introduces a Blockchain Protocol for Digital Assets Built on Monero, available at https://bitcoinmagazine.com/business/tari-introduces-blockchain-protocol-digital-assets-built-monero *with* Bitcoin Magazine, How Taro Brings Assets to Bitcoin Through Taproot and Lightning, available at https://bitcoinmagazine.com/technical/how-bitcoin-taro-protocol-works.

[20] 2019: https://cryptoslate.com/event/magical-crypto-conference/; 2020: https://app.qwoted.com/opportunities/event-magical-crypto-conference-2020

[21] The "Squirt" format is named for the case in which it was first approved, *Squirt Co. v. Seven-Up Co.*, 480 F. Supp. 789 (E.D. Mo. 1979).

[22] Swann, Jerre B. (2012), "Likelihood of Confusion," in Shari Seidman Diamond and Jerre B. Swann (eds.), *Trademark and Deceptive Advertising Surveys: Law, Science, and Design*, (Chicago: ABA Publishing), pp. 53 – 78.

B. Survey Methodology

48. Following a traditional Squirt format and methodology, Survey respondents were first shown the senior mark – in this case, the TARI® mark – as it is used in commerce (*see* "Product A" below). Second, after removing the senior mark from view, respondents were shown a random "lineup" of the other four marks. The lineup consisted of the "test" mark, which was Defendant's "TARO" mark (see "Product B" below), and three "control" marks of other firms in the digital assets industry (*Corda, Polygon, Echo; see* "Products C, D, and E").

Stimuli Used in Survey

Product A[23]	TARI	Product D[24]	polygon
Product B[25]	Taro	Product E[26]	Echo
Product C[27]	c·rda		

49. After viewing the test and control marks, respondents were asked a series of questions regarding their perceptions of any association between the senior mark and the test and control marks. A likelihood of consumer confusion is demonstrated if there is a significant difference in the percentage of respondents who perceive an association between the senior mark

[23] https://www.tari.com
[24] https://polygon.technology
[25] https://docs.lightning.engineering/the-lightning-network/taro
[26] https://pixelplex.io/work/smart-contract-layer-2-blockchain-protocol/
[27] https://corda.net

and the test mark relative to any associations perceived to exist between the senior mark and the control marks.

C. Selection of Appropriate Controls

50. A control condition is used in surveys to adjust for irrelevant factors that may influence respondents' answers to questions, such as prior beliefs and guessing, among others. The selection of appropriate controls for a likelihood of confusion survey involves the selection of similar types of firms and/or products which share characteristics with the test mark (i.e., Taro), but do not share the characteristic whose influence is being assessed.[28]

51. For controls, I selected three third parties – *Corda*, *Polygon*, and *Echo*. These three controls each share various characteristics with Defendant's TARO mark, in terms of appearance, color, design, fonts, number of letters, ending in a vowel, nature of business, and prominence of the respective marks. Importantly, each of the firms used as a control is a "plausible member of the same product category" to prevent product category similarity being an alternative explanation for high confusion between the TARI and TARO marks if the controls were in different product categories.[29] Equally important, none of the control brands had the targeted characteristic being tested, namely, the use of "Taro" in the mark. I used multiple control marks that had a variety of color, fonts, logo, number of letters, in recognition of the absence of a "perfect control" and to provide a more conservative test of the likelihood of consumer confusion.

52. I also intentionally included Tari's stylized "T" logo in the depiction of the TARI® mark, consistent with Tari's branding in the market. This makes the Survey a more conservative test since 1) this logo provides a point of differentiation between Plaintiff's TARI® mark (with

[28] Rappeport, Mike (2012), "Design Issues for Controls," in Shari Seidman Diamond and Jerre B. Swann (eds.), *Trademark and Deceptive Advertising Surveys: Law, Science, and Design*, (Chicago: ABA Publishing), pp. 217-239.

[29] Diamond, Shari Seidman (2012), "Control Foundations: Rationales and Approaches," in Shari Seidman Diamond and Jerre B. Swann (eds.), *Trademark and Deceptive Advertising Surveys: Law, Science, and Design*, (Chicago: ABA Publishing), p. 212.

logo) and Defendant's "TARO" mark (no logo), and 2) it also provides a point of similarity between TARI and the Polygon control mark. These two points reduce the levels of total and net confusions and thus makes the results a more conservative measure of confusion.

D. Relevant Consumer Population

53. The relevant consumer population for the Survey is defined as adult consumers (age 21 years or older) in the United States who in the past 6 months "Bought or considered using Bitcoin, stablecoins, cryptocurrencies, NFTs, or other digital assets" or plan to "Buy or use Bitcoin, stablecoins, cryptocurrencies, NFTs, or other digital assets" in the next 6 months. This is an appropriate population to test confusion of consumers most likely to "partake of the infringer's goods" in the marketplace.[30]

E. Qualifying the Sample of Consumers: Sampling Plan

54. The process by which individuals were selected to participate in the Survey is called sampling. The procedures that guide the selection of a sample are referred to as the "sampling plan." The goal of a sampling plan is to ensure that individuals included in the survey are representative of the relevant population to provide accurate insight into general customer views.

55. In marketing science, the sample size, or the number of respondents in business surveys vary, depending on the purpose, design characteristics of the survey, and availability of respondents. The sample size needs to be large enough to generate reliable results that can be reasonably projected to the wider universe at issue. Further, to assure the representativeness of the sample, quotas for age (+/10% approximate U.S. census population) and gender (+/10% of 50/50%) were also implemented.

56. The survey sample size was set to 200 respondents.

[30] Barber, William G. (2012), "The Universe," in Shari Seidman Diamond and Jerre B. Swann (eds.), *Trademark and Deceptive Advertising Surveys: Law, Science, and Design*, (Chicago: ABA Publishing), pp. 27-49.

1. InnovateMR Consumer Sample

57. The samples used in the present Survey were provided by InnovateMR, a leading supplier of Internet samples for surveys, and with access to a broad set of consumers from a wide range of ages, jobs, and industries. A detailed description of the InnovateMR panel is provided in **Exhibit 2.**

58. Internet panels are accepted as valid in marketing and scientific literature, particularly as consumer familiarity and comfort with online shopping and engagement have increased. Businesses and other organizations routinely make decisions of importance based on the results of Internet survey research among customers and such surveys have been accepted in evidence in many trademark and trade dress cases. Also, internet panels are particularly useful here, where the marks being tested will be seen primarily over the internet via digital devices.

59. InnovateMR has a large and diverse panel, consisting of millions of Americans, and is highly regarded as a reputable source of respondents for online surveys within the field of market research. InnovateMR utilizes appropriate industry procedures for ensuring the integrity and quality of its panels. InnovateMR employs a "by-invitation-only" panel recruitment model to enroll pre-validated individuals and, therefore, maintains a panel comprised of the most credible survey takers who are less prone to self-selection bias.

2. Invitation to Participate

60. Because respondents may choose to participate in the Survey or not, the samples are non-probability samples. In marketing and consumer research, non-probability sampling designs, such as those used in this survey, are the most common type of sampling. Academic and commercial researchers widely and appropriately rely upon well-designed and properly executed non-probability samples. Significant business decisions are routinely based on the results obtained from the use of such well-constructed sampling plans.

3. Accurately Reported Data

61. All survey respondents input their responses from their own computer, and these responses were recorded and validated electronically. InnovateMR employs an identity verification procedure when recruiting members for its Internet panels. Respondents may only participate in the survey if they input an individual password recognized by InnovateMR. Such identity verification is regarded as a best practice in the management of Internet surveys and serves to assure that the respondent to a specific survey is the actual panel member.[31]

62. Coding classifications for responses to open-ended questions in the Survey were developed by professional coders employed by California Survey Research Services. These coders had no knowledge of the purpose of the Survey. I personally reviewed and approved these coding classifications, which were subsequently used by the coders to classify open-ended responses and for data tabulation and reporting.

63. California Survey Research Services ("CSRS") coordinated the computer programming, data collection, coding, and data tabulation for the Survey based on my instructions. CSRS has significant experience running customer surveys and is known for providing highly reliable, professional survey research services. See **Exhibit 3** for detailed information on California Survey Research Services.

F. Survey Questionnaire

64. The Survey questionnaire was composed of two parts: (1) a "screener" that included questions used for identifying members of the defined population and (2) a main questionnaire that included questions asked only of respondents who met the qualifications for inclusion in the sample. A copy of the full questionnaire (both screener and main) used for the Survey is included

[31] Council of American Survey Research Organizations, Code of Standards and Ethics for Survey Research, http://www.casro.org/codeofstandards.cfm.

as **Exhibit 4**. It includes programming protocols and stimuli (*i.e.*, photos of the Tari, the test condition using Taro, and the marks used as Controls).

65. **Exhibit 5** provides screenshots of the Survey as seen by respondents.

1. Screening Questionnaire

66. An email invitation was sent to a random list of members of the InnovateMR Internet panel while accounting for screening criteria. Those that responded were directed to an Internet link that served as the Survey portal.

67. The "screener" questionnaire was to ensure the respondents were in the appropriate population as described previously. If the respondent failed to meet these conditions, they were terminated from the survey process. All screener questions were randomized to reduce order effects, when appropriate, and the last question of "None of the Above" was included, when appropriate, to reduce demand effects. Once screened, qualified respondents moved to the "main" questionnaire. This process ensures that participants are in the relevant population.

2. Main Questionnaire

68. The Main Questionnaire is the key feature of the Survey. The Main Questionnaire presented images for the marks included in the study (i.e., senior, junior, and control brands). Respondents were instructed to review the images "as you would if selecting a firm to deal with or a product/service to evaluate for purchase".

69. All respondents first saw Plaintiff's mark and were told this would be referred to as "Product No. 1." When respondents completed their review of the TARI® mark, they followed a link that took them to the next section of the main questionnaire. Respondents could not advance until 10 seconds elapsed.

70. The subsequent questions provided respondents with a "lineup" of images for Defendants' "TARO" mark and three other control stimuli marks (*Corda, Polygon, Echo*).

Respondents were required to review the images for a minimum of 10 seconds. The order of these images was randomized for each participant.

71. After being shown the brand mark "lineup," respondents were asked a series of questions to establish whether they believed that any of the marks shown were made by, affiliated with and/or otherwise endorsed by the company that makes Product No. 1. (*i.e.*, Tari). All questions allowed respondents to answer "Don't know" as a response to each prompt.

72. If respondents answered "yes" to these questions, they were then asked, which of the products were made by, affiliated with and/or otherwise endorsed by the company that makes Product No. 1. (*i.e.*, Tari).

73. For any mark(s) where the respondent indicated they were made by, affiliated with and/or otherwise endorsed by Product No. 1, they were asked an open-ended follow-up question: "Why do you think this? Please be as complete as possible, as it will help us understand your answer."

G. Survey Was Conducted by Qualified Persons Following Proper Procedures

74. As set forth above, I personally designed the Survey. Pursuant to my instructions, California Survey Research Services ("CSRS") coordinated the computer programming, data collection, coding, and data tabulation for the Survey. CSRS also prepared a codebook to use for coding the respondent's verbatim responses under my direction. I tabulated the Survey results based on the raw data provided by CSRS. CSRS also prepared summary tables of the results, which I checked for accuracy. Additionally, CSRS coded the verbatim portion of the Survey responses to reflect groups of common responses. The Survey's raw data and summary tables (including open-ended question coded results) are provided in **Exhibits 6 and 7**.

H. Objectivity

75. Respondents and front-line personnel in the survey research agency were kept uninformed about the purpose and sponsorship of the study. This was to eliminate any potential

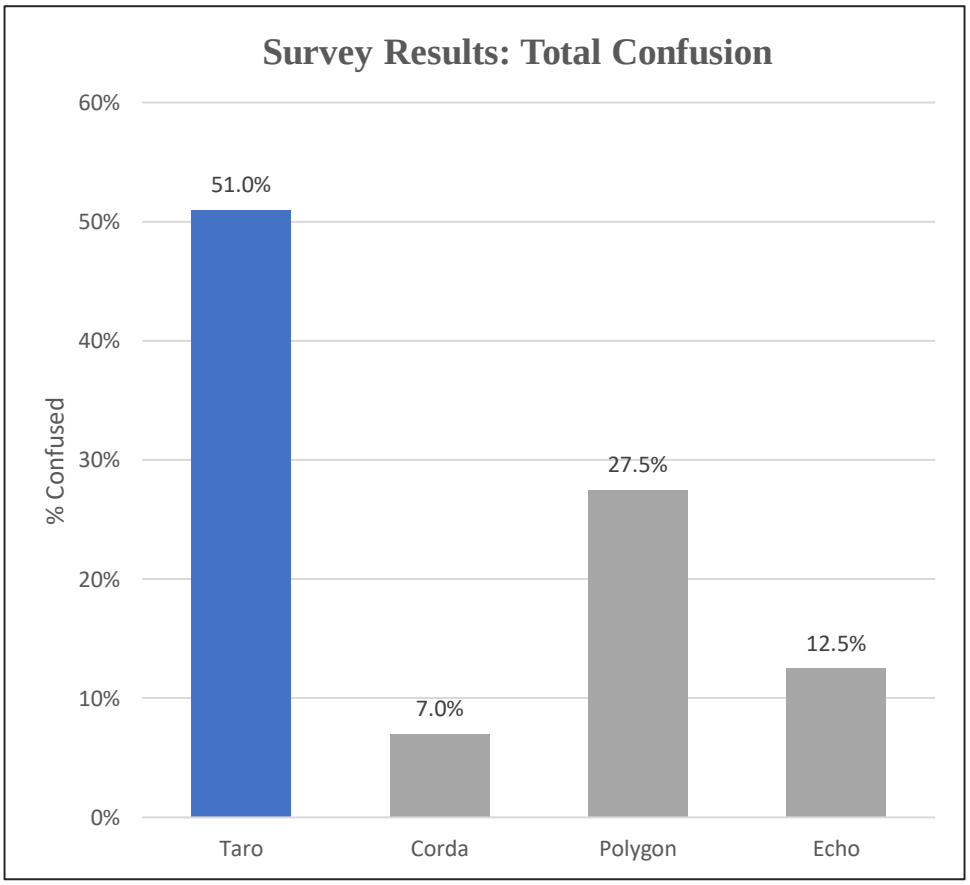
bias on the part of the operators. Without such knowledge or information, the possibility that respondents might correctly guess the purpose and/or the sponsor of the investigation is minimized. Similarly, without knowledge of the purpose and sponsorship of the survey, research agency personnel involved in such tasks as coding are unlikely to bias results in any specific direction.

I. Cost

76. CSRS's fees for programming, hosting the Survey, coding open-ended responses, processing data, and for panel respondents were approximately $4,709.

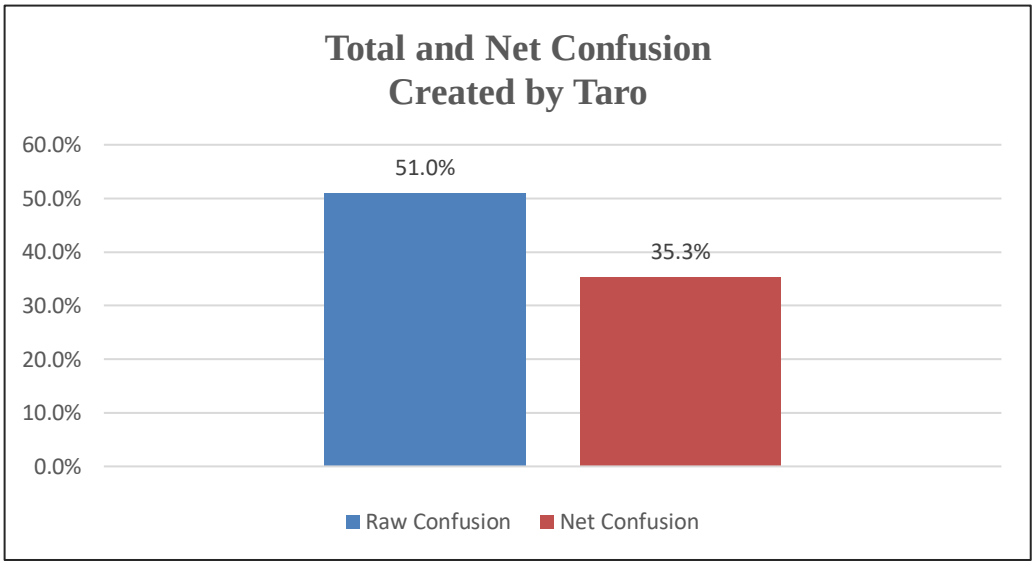
V. SURVEY RESULTS AND FINDINGS

77. The Survey results showed that there were very high levels of both "total" and "net" confusion among consumers. Specifically, results showed that more than ***51.0%*** of respondents believed that the TARO mark was made by Tari, or a company affiliated with or authorized by Tari.



78. It is customary in the analysis of the likelihood of consumer confusion surveys to correct for respondents' prior beliefs, guessing, and other irrelevant factors that may produce consumer confusion, by computing a "net confusion" score. This is done by subtracting the confusion produced by the average of the third party "control" marks from the "total confusion" produced by the mark being tested.

79. I calculated the net confusion score by subtracting the level of confusion demonstrated for the average of the control products (*Corda:7.0%, Polygon-27.5%, Echo-12.5%*) from the level of total confusion demonstrated for Taro's mark. Specifically, the average confusion across the three controls was 15.7%, since the total confusion for the TARO mark was 51.0%. Thus, the net confusion produced by the TARO mark was 35.3% above the average of the control marks.



80. Levels of net confusion above 20 to 25% are generally accepted as significant evidence of confusion.[32] The levels of confusion produced by the TARO mark far exceed these threshold levels. This indicates that confusion is highly likely to occur in the marketplace between the TARI® and TARO marks.

81. Study participants who identified Taro as made by, affiliated with, or authorized by Tari were asked the follow-up question, "Why do you think this? Please be as complete as possible, as it will help us understand your answer." These responses were coded based on the reason given by each respondent (See Exhibit 7 for details). These open-ended responses were very informative, as the customers that confused Defendant's mark with Plaintiff's mark gave the reason "**Similarity in Name"** (i.e., "Name is similar/the same name"; "Starts with the same letters/Tar"; "Font/styling of the letters is the same/similar"; "Color of the lettering/black letters") based on open-ended coding done by CSRS *67% of the time*. Specifically, of the 102 of 200 respondents who confused the Defendant's with Plaintiff's marks, 68 of these potential customers attributed this confusion to the similarity of Taro to Tari's Marks (i.e., 67%). This was the top reason given for confusion across all marks (i.e., test and controls).

82. Overall, the results of the Survey demonstrate a high likelihood of consumer confusion attributable to Defendant's use of the TARO mark.

83. These results are particularly striking because the survey was designed conservatively – 1) by using the stylized "T" logo with the TARI® mark as a point of differentiation between Tari and Taro, and 2) including Polygon with a logo as one control. Despite

[32] Ford, Gerald L. (2012), "Survey Percentages in Lanham Act Matters," in Shari Seidman Diamond and Jerre B. Swann (eds.), *Trademark and Deceptive Advertising Surveys: Law, Science, and Design,* (Chicago: ABA Publishing), pp. 311 – 326.

these conservative measures, Defendant's use of TARO still caused high levels of consumer confusion.

VI. THE INFRINGING PRODUCTS WILL CAUSE IRREPARABLE HARM TO TARI

84. Given the high level of consumer confusion shown in this study, the release of the Taro products to the same market as Tari is highly likely to cause immediate and irreparable harm to Tari.

85. Branding affects how consumers perceive products in the marketplace and it determines the attributes that consumers associate with those products. In tracking and measuring these branding effects, researchers use a model called the "Associative Network Memory" model, which describes how marketing affects consumers' minds. This model is based on the premise that the human brain is a network of nodes and connecting links. Like that structure, the key characteristics of a brand are similarly expressed as nodes and links.[33]

86. Specifically, brand awareness—which reflects a customer's ability to identify or recall a brand—is evidenced by the size and strength of the *node* for that particular brand. And *brand image*—or a customer's perceptions of and associations with the brand—is represented by the *links* of that brand-name node to other informational nodes in the model.

87. The unique linkages that are associated with a brand name capture the brand's identity and its differential advantage in the marketplace. In the Associative Network Memory model, brand strategy involves first building awareness to provide an anchor point, or node, for the brand, and then building linkages to other positive and unique nodes. When a customer sees or hears the brand name, that node is activated, which leads to the cascading activation of other linked nodes. The stronger the linkages, the more forceful that cascading effect—which creates the customer's brand experience. Tari, since its founding in 2018, has been increasing its awareness

[33] Palmatier, Robert W., Shrihari Sridhar, (2017), *Marketing Strategy: Based on First Principles and Data Analytics*, Palgrave Macmillan, London.

and crafting a unique brand image in the minds of customers, developers, and industry influencers as reflected in the recognition and positive press they have received.

88. The goal of branding in the commercial context is to affect consumer behavior in ways that generate revenue. The value of a brand represents the sum of the benefits generated for the company by consumers' brand-induced behaviors. Strong brand equity can improve sales, reduce costs, and make it more difficult for competitors to encroach on a firm's business.[34]

89. If Taro enters the market using a confusingly similar name, Tari's brand equity will be negatively impacted in multiple ways that significantly impact sales and profits and create long-term damage to Tari's brand.[35]

A. Harm to Reputation and Brand Image

90. Tari is likely to sustain harm to its reputation and brand damage. This harm will likely play out in multiple ways in different market scenarios, as detailed in the Declaration of Naveen Jain submitted with Tari's motion. I briefly analyze the harm to Tari's brand and business from each of these scenarios below:

91. First, both protocols will allow users to create digital assets such as NFTs. If users select the wrong protocol for their NFT – *e.g.* Taro rather than Tari – they will be unable to hold or transfer the NFT as expected. These consumers may conclude that Tari's protocol did not work as intended, damaging their perception of Tari's brand and causing them to avoid using Tari's products and services in the future.

[34] Keller, Kevin L., (2013), *"Strategic Brand Management: Building, Measuring, and Managing Brand Equity"*, 4th ed. Upper Saddle River, NJ: Pearson/Prentice Hall; Mizik, Natalie, (2014), "Assessing the total financial performance impact of brand equity with limited time-series data", *Journal of Marketing Research*, 51(6), pp. 691–706.

[35] Stahl, Florian, Mark Heitmann, Donald R. Lehmann, and Scott A. Neslin, (2012), "The impact of brand equity on customer acquisition, retention, and profit margin," *Journal of Marketing*, 76(4), pp. 44–63; Keller, Kevin L, (2013), *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*. Upper Saddle River, NJ: Pearson/Prentice Hall.

92. Second, consumers may become confused when browsing NFTs and other digital assets for purchase. If consumers purchase assets that are compatible with Taro rather than Tari, they again will be unable to hold or transfer the assets as expected. These consumers are also likely to blame Tari or its technology for their adverse experience, damaging Tari's brand.

93. Third, consumers will need to choose digital wallet apps that are compatible with the appropriate protocol in order to hold Tari-compatible assets. If consumers download the wrong wallet based on confusion between Tari and Taro, they will be unable to hold their intended assets. Again, these consumers are likely to conclude that Tari's protocol did not work as intended and avoid using it.

94. Fourth, consumers will need to choose the appropriate protocol to be used in digital "smart contracts" using online tools. Consumers who mistakenly choose the wrong protocol will not be able to create their contract successfully and will be left with a negative impression of Tari.

95. Fifth, developers considering blockchain protocols may either select incompatible programming tools or start coding a software application that will be integrated with the incorrect protocols. Developers who have this experience will likely be left with a negative impression of Tari. Additionally, developers concerned about the confusion among their end users based on the similarity between the Tari and Taro names will likely avoid using Tari in order to avoid this confusion.

96. These negative consumer experiences can have a dramatic negative effect on brand equity. Consumers who have negative experiences are not only likely to avoid the products and services in the future, but if they communicate this unsatisfactory performance to friends and colleagues or on social media it can impact the decisions of many other customers. This can impact sales over time with a multiplication effect across consumers and cause a long-term diminution in the value of the brand.

B. Destruction of Source-Identifying Function of Trademark

97. Consumer confusion also impairs the source-identifying function of the TARI trademark by creating false associations in consumers' minds with Defendants' Taro. This harms the basic effectiveness and value of Tari's brand in allowing consumers to identify the source of its products, again undermining the long-term relationship between Tari and its customers and undermining the positive qualities and associations that drive Tario's brand growth.

C. Initial Interest Confusion

98. Consumer confusion may also occur when consumers and developers are investigating Tari's protocol and browsing available options. These customers may attempt to gain more product and technical information, build their consideration set of options, or take other steps in the buying or design process, including online searches. Given the close proximity of the protocols in the market, these customers may encounter and investigate *Taro's* website, LinkedIn profile, and other materials instead of Tari's. This is known as "initial interest confusion" and refers to confusion that occurs during the early stages of the buying and investigation process, even if consumers ultimately realize the products come from different sources.

99. Such initial interest confusion will cause damage to Tari's brand and business performance.[36] In the time it takes for the customer or developer to resolve this confusion, they can find another competitor's product, or build false associations with the "Tari" brand as they evaluate the Taro web site and marketing materials. Barriers or extra work for a customer or other decision

[36] Courts have found that initial interest confusion results in damages Brookfield Communications, Inc. v. West Coast Entertainment Corporation, 174 F.3d 1036 (9th Cir. 1999); "The likelihood of confusion analysis is often focused on confusion at the time of purchase, but the U.S. Court of Appeals for the Second, Third, Fifth, Sixth, Seventh, Ninth, Tenth, and Federal Circuits permit mark holders to allege infringement based on pre- sale, initial-interest confusion (whereas the First, Fourth, and Eleventh Circuits do not)." From New York Law Journal September 7, 2021 in article titled *Initial-Interest Confusion Doctrine at the Supreme Court*.

maker to find information about a firm or product they are evaluating ultimately damages the brand and the firm's financial performance[37].

100. Initial interest confusion is especially important for a new product or business. "Early adopters" are among the most influential customers for a new venture. In these circumstances, a business often only has one initial consideration opportunity with a potential customer, user, or developer. Tari may never get a chance to clear up this confusion before the potential customer moves on to one of its competitors. In addition, there are many decision makers, developers, and influencers in the digital assets and protocol ecosystems and each one of these decision makers may conduct searches for information that can derail the search process if there is confusion. Thus, even if only one key decision maker is confused, then the sale or ultimate adoption of Tari's product can be impacted.

D. Tari Faces Significant Harm

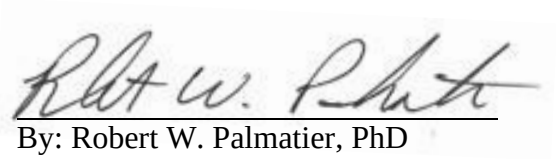
101. For these reasons, Tari faces significant harm from consumer confusion if Defendant proceeds with a full-scale launch of its protocol under the TARO mark.

102. These harms to Tari's brand and trademark are very difficult to repair, will play out over a long-term time horizon, and cannot be easily calculated or reduced to a monetary figure. Even if Tari ultimately prevails in this case, it would be difficult or impossible to compensate for the confusion caused by the infringing mark and the damage that the infringement will cause to Tari's brand equity.

[37] Palmatier, Robert W., Shrihari Sridhar, (2017), *Marketing Strategy: Based on First Principles and Data Analytics*, Palgrave Macmillan, London; Palmatier, Robert W., Eugene Sividas, Louis W. Stern, and Adel I. El-Ansary (2019), Marketing Channel Strategy: An Omni-channel Approach, 9th ed., Routledge.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct and represents my expert opinion in this matter based on the materials and information I have reviewed to date.

Dated: February 21, 2023



By: Robert W. Palmatier, PhD